

AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A method for obtaining information useful for management of a composite e-service, comprising ~~the steps of:~~

generating a set of management information for each of a set of service interactions among a set of e-services in the composite e-service, the e-services arranged in a tree structure including ~~one of the e-services~~ a first e-service that provides a portal to the composite e-service;

in performing the set of service interactions, at least the first e-service sending a first request to a second e-service at a first lower level of the tree structure, and the second e-service sending a second request to a third e-service at a level of the tree structure lower than the first lower level;

transferring the sets of management information up the tree structure to the e-service that provides the portal; and

combining the management information at each of a set of levels of the tree structure.

2. (Currently Amended) The method of claim 1, ~~wherein the each further comprising: in performing the set of service interaction comprises a request from one of the e-services and interactions, at least the third e-service sending a response from a sub-service in the tree that handles the~~ to the second e-service in response to the second request, and the second e-service sending a response to the first e-service in response the first request.

3. (Currently Amended) The method of claim 1, wherein ~~the~~ each set of management information is contained in a management object.

4. (Original) The method of claim 3, wherein the management object has the form of an XML document.

5. (Original) The method of claim 1, wherein the step of combining the management information comprises the step of combining the management information using an indicator carried in each set of management information that identifies a service interaction between a client and the portal.

6. (Original) The method of claim 1, wherein the management information includes a time taken by the corresponding e-service to complete a corresponding request.

7. (Original) The method of claim 1, wherein the management information includes an indication of errors that occurred in the corresponding e-service while servicing a corresponding request.

8. (Original) The method of claim 1, wherein the management information includes a set of costs incurred in the corresponding e-service while servicing a corresponding request.

9. (Original) The method of claim 1, wherein the management information includes an indication of security violations that occurred in the corresponding e-service while servicing a corresponding request.

10. (Original) The method of claim 1, wherein the management information includes an indication of resource usage in the corresponding e-service while servicing a corresponding request.

11. (Currently Amended) A composite e-service comprising a set of e-services arranged in a tree structure including ~~one of the e-services~~ a first e-service that provides a portal to the composite e-service, each e-service having a manager such that the managers collectively generate a set of management information for each of a set of service interactions among the e-services and transfer the sets of management information up the tree structure to the first e-service ~~that provides the portal~~ while combining the management information at each of a set of levels of the tree structure,

wherein to perform the service interactions, the first e-service to send one or more requests to one or more services at a first lower level of the tree structure, and the one or more e-services at the first lower level to send one or more requests to one or more e-services at a level in the tree structure lower than the first lower level.

12. (Original) The composite e-service of claim 11, wherein each e-service includes an application that processes the corresponding service interaction while the corresponding manager gathers the corresponding management information.

13. (Original) The composite e-service of claim 11, wherein the managers assemble the management information into a set of management objects.

14. (Original) The composite e-service of claim 13, wherein each management object has the form of an XML document.

15. (Original) The composite e-service of claim 11, wherein the managers combine the management information using an indicator carried in each set of management information that identifies a service interaction between a client and the portal.

16. (Original) The composite e-service of claim 11, wherein the management information includes a time taken by the corresponding e-service to complete a corresponding request.

17. (Original) The composite e-service of claim 11, wherein the management information includes an indication of errors that occurred in the corresponding e-service while servicing a corresponding request.

18. (Original) The composite e-service of claim 11, wherein the management information includes a set of costs incurred in the corresponding e-service while servicing a corresponding request.

19. (Original) The composite e-service of claim 11, wherein the management information includes an indication of security violations that occurred in the corresponding e-service while servicing a corresponding request.

20. (Original) The composite e-service of claim 11, wherein the management information includes an indication of resource usage in the corresponding e-service while servicing a corresponding request.

21. (New) A system comprising:
- a plurality of modules to provide a set of digital services arranged in a tree structure, the digital services comprising at least one of on-line electronic commerce services, on-line news services, on-line sports services, on-line entertainment services, and on-line educational services;
  - the modules to communicate to enable the digital services to interact,
  - the modules to generate sets of management information as a result of the interacting of the digital services,
  - the modules to transfer the sets of management information up the tree structure and to combine the management information at each module as the management information is transferred up the tree structure.
22. (New) The system of claim 21, wherein a first one of the digital services is a portal to the set of the digital services.
23. (New) The system of claim 22, wherein a first one of the modules associated with the first digital service is adapted to send one or more requests to one or more modules associated with digital services at a first lower level of the tree structure, the one or more modules associated with digital services at the first lower level to send one or more requests to one or more modules associated with digital services at a level in the tree structure lower than the first lower level.
24. (New) The system of claim 23, wherein the one or more modules associated with digital services at the level lower than the first lower level are adapted to send one or more responses to the one or more modules associated with digital services at the first lower level, and the one or more modules associated with digital services at the first lower level to send one or more responses to the first module.